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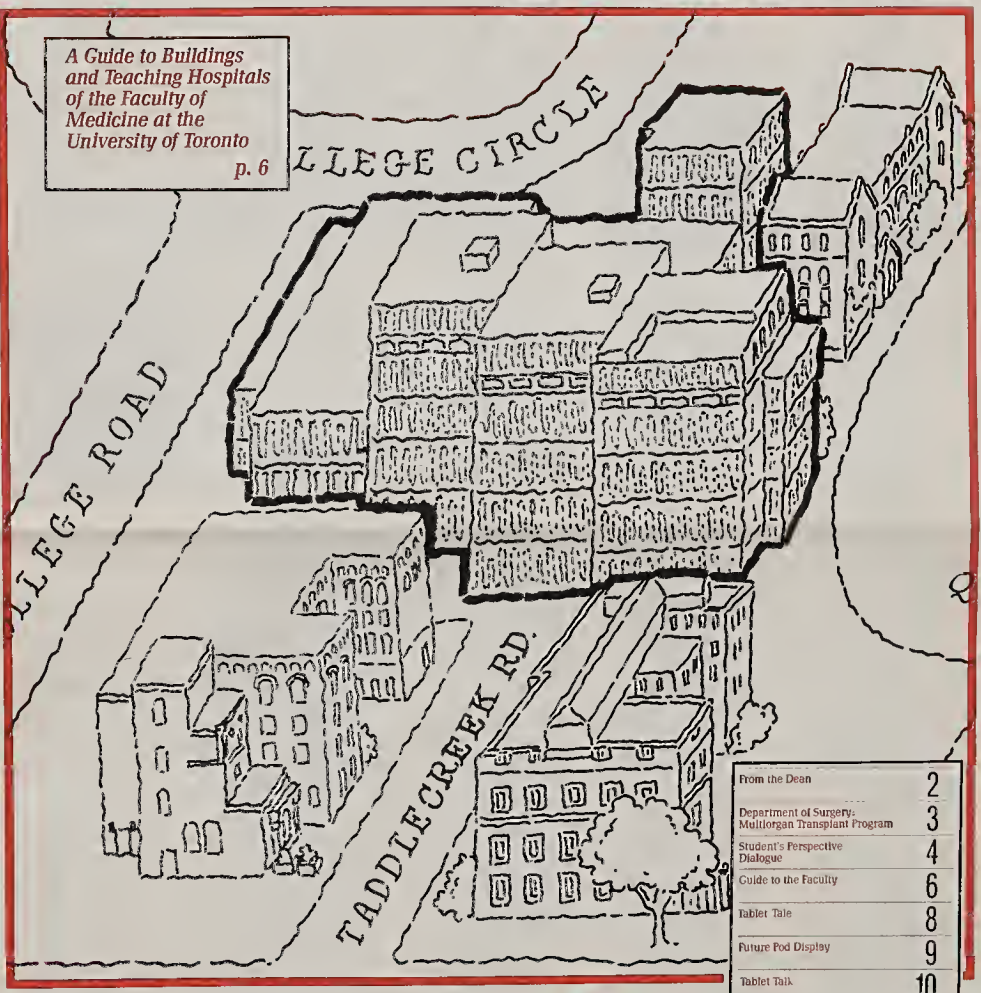

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from the dean

The 1985 Nobel Peace Prize

The recent awarding of the 1985 Nobel Prize for Peace to International Physicians for the Prevention of Nuclear War (IPPNW) was both surprising and gratifying. It signifies official recognition for a coalition of physicians on both sides of the Iron Curtain who, in their spare time, have campaigned for nuclear sanity. IPPNW is the umbrella organization which covers a variety of national medical and scientific organizations in dozens of countries. (In Canada and the United States the relevant organization is Physicians for Social Responsibility).

... physicians have an important role to play ... in sensitizing people, particularly governments, of the need for nuclear arms control and reduction.

IPPNW began with an exchange of letters in October 1979 between Dr. Bernard Lown, a professor of cardiology at Harvard University, and Dr. Evgeni Chazov, Director-General of the USSR Cardiology Research Centre and Deputy-Minister of Health of the Soviet Union. It was incorporated in June 1980 and held its first World Congress in Virginia, near Washington, in March 1981. There have been annual subsequent congresses that have brought together a wide variety of physicians, not only dedicated peace activists but many scientific and academic leaders from around the world who were concerned but initially sceptical. They have returned to their medical schools and their communities convinced that physicians have an important role to play, (alongside politicians, writers, political scientists, economists, etc.) in sensitizing people, and particularly governments, of the need for nuclear arms control and reduction.

This is part of widespread general interest in the possibility of more effectively influencing the decision mak-

ers of the world's nuclear nations. During the past few years nuclear disarmament has again become a major public issue and, for the forthcoming summit meeting of President Reagan and Chairman Gorbachev, there would appear to be a climate in which both leaders feel considerable pressure to achieve serious nuclear arms control measures.

One interesting feature of the renewed international outcry against the threat of nuclear annihilation has been the active role played by physicians. We are generally reticent about becoming involved in political and social issues that do not immediately concern the practice of medicine. During the major anti-nuclear protests of the 1950's and 1960's the medical profession was not seriously involved. This is not surprising since those protests were spearheaded in North America and in Western Europe by adherents of the political left, with which only a small minority of physicians are associated.

... why has it taken us so long to become involved in this issue ...

However, prominent physicians around the world have been in the vanguard of the new anti-nuclear protests of the late 1970's and 1980's. Dr. Helen Caldicott, an Australian-born Boston pediatrician, and many of her Harvard colleagues in 1978 sparked the resurgence of Physicians for Social Responsibility (PSR), whose membership has soared from a few dozen to more than 15,000 with chapters from coast to coast in the United States. *Time* magazine has called PSR the most effective group in the U.S. anti-nuclear movement. Prominent physicians are PSR members in many U.S. and Canadian communities.

This Faculty has contributed substantially to this development. In Canada, PSR was launched in 1979, largely through the efforts of Dr. Frank Sommers, a member of our Department of Psychiatry. Dr. Sommers was the first president of the Toronto chapter of PSR, a position now held by Dr. Ian Hastie of Wellesley Hospital. PSR occupies offices made available by the Faculty, in the Banting Institute on College Street. Two symposia on the Medical Consequences of Nuclear War were held at the University of Toronto in 1981 and 1985, and in October, 1984 our Faculty Council, following the lead of other Canadian and U.S. medical schools, passed a resolution calling for disarmament and prevention as the only feasible medical responses to nuclear war.

... passed a resolution calling for disarmament and prevention as the only feasible medical responses to nuclear war.

Why are physicians now playing such an active part in the anti-nuke campaign? There are two basic reasons, both based upon the recognition that nuclear disarmament is a global health issue. The first is that a nuclear war would result in immediate mass killings on a scale barely imaginable and the slow death of many millions more, with inestimable genetic defects transmitted to future generations. In the words of Dean Howard Hiatt of the Harvard School of Public Health, a nuclear war between the superpowers would be "the ultimate epidemic of mankind".

The second reason for physicians' greater commitment is the realization that the public must be warned that doctors and the health care system will be of little use following a nuclear conflagration. Hospitals, and particularly the tertiary care facilities required to maintain life after severe trauma, are situated in the core of cities that will be devastated by nuclear bombs. Most physicians and other health professionals will be dead or injured, equipment and supplies will be destroyed, and the remaining health care resources in towns that have been spared will be totally overwhelmed. Even now our best hospitals are strained to the limit when civilian disasters produce dozens of severely burned and traumatized persons. The care of millions (or even thousands) of dying but potentially salvageable people who need immediate care is far beyond our present capabilities. In summary, a nuclear tragedy will be aggravated by the neutralization of the health care system that we now count on to limit the consequences of disasters.

We are generally reticent about becoming involved in political and social issues that do not immediately concern the practice of medicine.

If the immediate results are too horrendous to accept, the long range ecological effects on this planet are no less terrifying. Therefore, more pertinent than the question "Why are so many physicians now advocates of nuclear disarmament?" is to ask why it has taken us so long to become involved in this issue and why so many of us still remain indifferent.

This month Drs. Lown and Chazov received honorary degrees from Queen's University, one of the many honors being bestowed upon them nowadays. The Nobel Prize for Peace is even more prestigious recognition now not only for them but also the other founders of IPPNW and PSR, including members of our own Faculty.

Frederick H. Lowy
Dean

tablet

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Surgery Expands Clinical Excellence to Multiorgan Transplants

"When John Hunter, the father of British scientific surgery, in 1771 took a sound tooth from a person's head and then made a pretty deep wound with a lancet into the thick part of a cock's comb and pressed the fang of this tooth into this wound, fastening it with threads to other parts of the comb, he was anticipating the first human transplant by nearly two centuries."
South African Medical Journal, December 30, 1967.

Since Christiaan Barnard's first attempt at a human heart transplant at Cape Town's Groot Shuur Hospital nearly two decades ago, public interest in surgical transplantation has ebbed and flowed with the media's coverage of subsequent successes and failures.

In Toronto, interest has peaked with the Department of Surgery's recent proposal that a Multiorgan Transplantation Unit be developed within the Faculty of Medicine and four of its teaching hospitals — Toronto General, Toronto Western, the Hospital for Sick Children and St. Michael's. In its report, released earlier this year, the Department, which is chaired by Dr. Bernard Langer, recommends implementing multiorgan transplant units as an extension to the centres where there is demonstrated clinical need as well as trained support staff and research facilities. The Department plans to build upon the excellence of its established renal program.

According to Dr. Joel Cooper, Head of Thoracic Surgery at Toronto General, in addition to having considerable dramatic appeal to a surgeon, organ transplantation is also of great interest to the pathologist, immunologist, histologist and hematologist. He adds that this type of team effort generates an aura of excitement in academic circles.

Dr. Joel Cooper, Head of Thoracic Surgery at Toronto General Hospital

The Department proposes that the four hospitals develop transplant teams incorporating the interests and clinical expertise of the individuals involved. These teams — an integrated group of clinicians, basic scientists and related paramedical staff — will be responsible for specific organs. Toronto General and the Hospital for Sick Children will become the centres for renal, liver, lung and heart-lung transplants in adults and children. Toronto Western will focus on renal and cardiac transplants. St. Michael's Hospital will concentrate on renal transplants. (Ed. Note: At press time, Dr. Tyrone David at Toronto Western had performed three successful cardiac transplants. Dr. Cooper and his team, consisting of staff from Toronto General and Mount Sinai had transplanted two lungs successfully — the first in the world — as well as two combined heart/lung transplants.)

"Transplants can be broken into two groups; those that are more or less routinely established — heart, kidney, liver, cornea and bone — and those that are still experimental in nature — lung, heart/lung, pancreas and small bowel," says Dr. Cooper. "In the case of the experimental transplants, one does not know what the future will hold, although in the case of lung and heart/lung the results thus far are encouraging."

Internationally Recognized Renal Transplant Program

As previously implied, transplants are far from a new venture for the Department. In fact, the excellence of the renal transplant programs at the four hospitals provides much of the impetus for the program. Last year, close to 150 successful kidney transplants were completed.

"Since we started doing kidney transplants in the 1960s, we now have reached the point where it is the treatment of choice for many patients," says Judy Falk, Director of the Histo-Compatibility Laboratory (HCL) at Toronto Western. "The one year success rate is 80 percent, yet even in the late 1970s that rate was only 40 to 50 percent."

She explains that aggressive renal programs lead to the development of the necessary ancillary support areas. For example, the HCL, established in the late 1960s, now does testing for all four hospitals to optimize donor - recipient compatibility and as well keeps records of donors and recipients across Ontario for exchange throughout the province. In 1976, the M.O.R.E. (Multiple Organ Retrieval and Exchange) program, based at Toronto General, was formed to aid in the province-wide harvesting of kidneys and other donor organs for transplants.

Falk states that the donor pool has increased in the past five years, yet the number of donors now has plateaued. Researchers have found that 70 to 80 percent of all kidney donors are eligible to donate other organs. However, with the new proposal there is an obvious need to increase donor awareness through advertising.

Urgent Need for Support in Basic Scientific Research

Falk believes that in an academic centre like the University of Toronto, a transplant program should be extended, not just at the clinical level but with academic backup including research facilities. She says the clinical component is first class internationally, yet the research aspect has lagged behind. The HCL is involved in research in immunomodulation and plans to offer training of investigators .

As well, the Chairman of the Department of Immunology, Dr. Richard Miller, recently outlined his proposal for a research group of at least three scientists to study the basic science aspects and mechanisms of rejection. Surgical trainees will be encouraged to participate in the research.

... this type of team effort generates an aura of excitement in academic circles.

One of the most fascinating clinical research projects that the Histo-Compatibility Lab participated in has achieved international recognition and is known as the "Toronto Data." As Falk explains, until quite recently, recipients were not given kidneys if they had shown any signs in past testing of being sensitized to the donor. Sensitivity to the donor can lead to a hyper-acute rejection of the organ, sometimes within hours of the transplant. Since immune response is a memory system, it was commonly assumed that a recipient known to be sensitive in the past would always be sensitive.

Judy Falk, Director of the Histo-Compatibility Laboratory

Then, in 1979, Dr. Carl Cardella, Head of Transplant Nephrology at Toronto Western, working with the Lab, decided to study this assumption. Over time, more and more patients, who were highly sensitized, had accumulated, but could not be given transplants. However, it was discovered there was no data to support the theory that they would have a secondary immune reaction.

A prospective study of fifteen sensitized patients was initiated at Toronto Western, and the startling discovery was made that the assumption was false. With these encouraging results, Dr. Cardella then approached nephrologists at the other three hospitals, who willingly cooperated with the research. Findings from a total of 60 patients showed that even if a patient had shown reactivity in the past, because of the new and very potent immunosuppression techniques, he/she might not show the same reactivity in the present. Falk adds that this observation has been confirmed at other centres around the world.

"... it will take very little to make our program first-class."

Transplants — a Collaborative Effort

"One of the major reasons that the Department of Surgery has focussed on transplants is the excellent clinical support," says Falk. "And, of course, there is a proven clinical need. With so many trained, talented people in surgery and basic research, it will take very little to make our program world class." ■

Medical Society Plays Role in Faculty Planning

In the following interview, Jackie James, President of the Medical Society discusses the Society's role in representing students within the Faculty. She also makes some interesting observations about learning to be a doctor in the 1980's.

What is the purpose of the Medical Society?

"The purpose is really two-fold.

First, the Medical Society serves to represent the interests of the students in Faculty matters. We have several representatives on Faculty committees. So we are able to act as a liaison between the Faculty and the student body in terms of their (Faculty) accessing our opinions. Conversely, we have a formal mechanism to express our concerns.

Second, the Society functions to encourage medical students to participate in extra-curricular activities, both as leaders and participants. Medical students tend to be very academically-oriented, sometimes to the point of foregoing outside interests. It is so important to be involved in activities beyond the academic and to start learning how to balance medicine with social and family commitments early in one's medical training.

The Society's activities and clubs offer students a chance to sharpen interpersonal skills as well as giving them an outlet for the stresses of medical school. It often becomes a basis for forming relationships with other med students, which can be carried on into professional life. It is important to be able to talk to your colleagues, not only about medicine, but also as a support system for personal concerns and problems."

Is there sufficient interaction between the Faculty and the Medical Society?

"It has grown substantially over the past few years. I think this school is probably quite progressive in terms of the amount of communication going on between students and administration. It has really been due to a collaborative effort between concerned students and Faculty members who valued our opinions."

Is curriculum planning the only area of Faculty administration that students formally participate in?

"No, not at all. In addition to the Undergraduate Medical Curriculum Committee, we have students on the Admissions, Appeals, and Awards committees. Students are also asked to participate on Faculty committees on an ad hoc basis.

As well, this year student representation has been extended so that we now have students sitting on the course development committees on most courses in the undergraduate curriculum. I don't think that this approach is very common at other Canadian medical schools."

Do you feel the Faculty takes the Medical Society seriously?

"Yes, most definitely. There is encouragement for students to speak out — not that our advice is always taken. However, the Faculty has been in the business of medical education for a long time. With this background, the Faculty is in the best position to weight the validity of students' suggestions.

It is reassuring to know that some people who are making policy decisions in the Faculty are at least taking the students' opinions into consideration."

How is student support for the Medical Society?

"Everyone is a member of the Society by virtue of being a medical student and students are encouraged to think of the Society as theirs. I think there is good active support from the student body as evidenced by the number of students who both volunteer to sit on various committees and take the initiative to organize activities.

The Society's governing body is the Medical Society Assembly which this year is comprised of nearly 90 elected and appointed members.

"... this school is quite progressive in terms of the amount of communication going on ..."

Decisions regarding the well-being of the student body as a whole are handled by plurality of vote of the Assembly. With such a large proportion of representation it is felt that student views are fairly well reflected."

What is the Medical Society's relationship with the Medical Alumni Association?

"There's considerable effort on the part of the Alumni to get more involved with students. The Alumni has always been supportive of student endeavours in the past. If we have a special project or purchase that needs outside funding, we have the avenue to appeal for funds to the Alumni Association.

Certainly from the viewpoint of the Society's administration, we have a very good working relationship."

"Medical students tend to be very academically-oriented ... to the point of foregoing outside interests."

Why do you think people choose to go into medicine in the '80s?

"There are a variety of things that attract people to medicine. Obviously one consideration is the prestige of the profession. Yet, people rarely go to med school purely for the glamour.

One must have some altruistic qualities to work with sick and dying people on a day-to-day basis. I'm sure there are some people who consider medicine a 'job', but I find it hard to believe that is a large percentage. I guess the call to helping people has to be very strong.

Medicine is a changing field where the doctor is no longer Almighty God. There has to be team effort put into patient care. This approach is highly cooperative, so people going into medicine have to be prepared to work very closely with others."

What are your expectations for the future? Have these changed since you started med school?

"When I started med school I expected to be part of a challenging, expanding and demanding field but I was also prepared for change and disillusionment. There is a lot of media coverage and public awareness about the stress and burn-out associated with medicine.

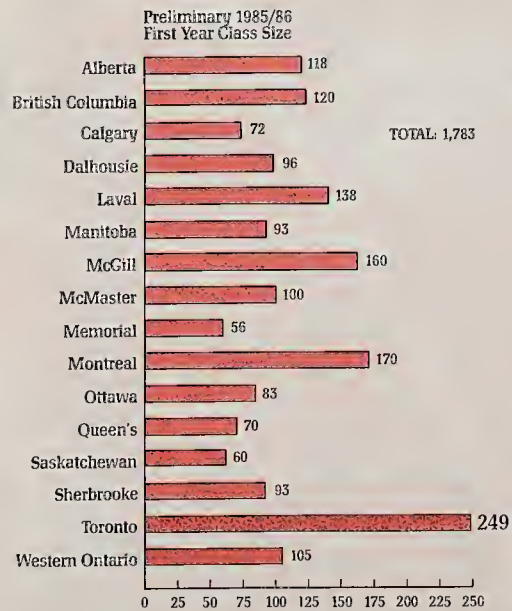
The actions of doctors are being questioned by their patients far more than in the past.

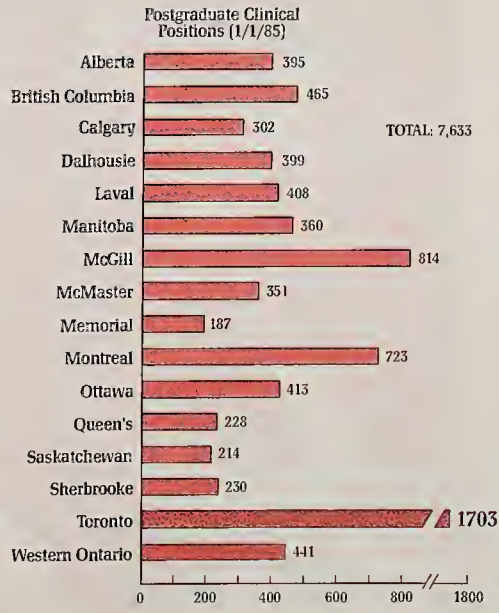
"... people rarely go to med school for the glamour."

One of my expectations which has changed is the realization that a lot of medicine is not curative. In the past the doctor was expected to be able to walk into the room, talk to the patient, make a diagnosis, recommend treatment ... and cure the patient. There are now many chronically-ill people who require care, but who will never be cured. Although, courses such as Community Health attempt to make us aware of the problem of a growing elderly population, much of the clinical teaching is still based on the model of the acutely ill patient. Many students, including myself, have difficulty adjusting to the realities of treating chronic illness.

Also, I had not expected the profession of medicine to be quite so political. In the future, doctors will have to choose people who will represent their interests fairly and accurately when dealing with governments."

National Data on First Year Class Size and Postgraduate Clinical Positions





Could You Tell Me How To Find ...?

A Guide to Buildings and Teaching Hospitals of the Faculty of Medicine at the University of Toronto

Sunnybrook Medical Centre
2075 Bayview Avenue

SPADINA CRESCENT

One Spadina Crescent

RUSSELL ST.

KINGS COLLEGE

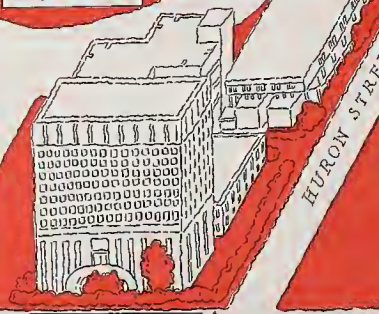
Medical Sciences Building
1 King's College Circle

Addiction Research Foundation
33 Russell Street

SPADINA AVENUE

HURON STREET

KINGS COLLEGE ROAD

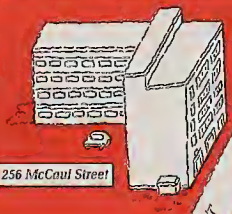


Roseburgh Building
4 Taddle Creek

TADDLECR

Clarke Institute of Psychiatry
250 College Street

COLLEGE STREET



256 McCaul Street

Mount Sinai Hospital
600 University Avenue

McCAUL STREET

UNIVERSI

Toronto Western Hospital
399 Bathurst Street

Hospital for Sick Children
555 University Avenue

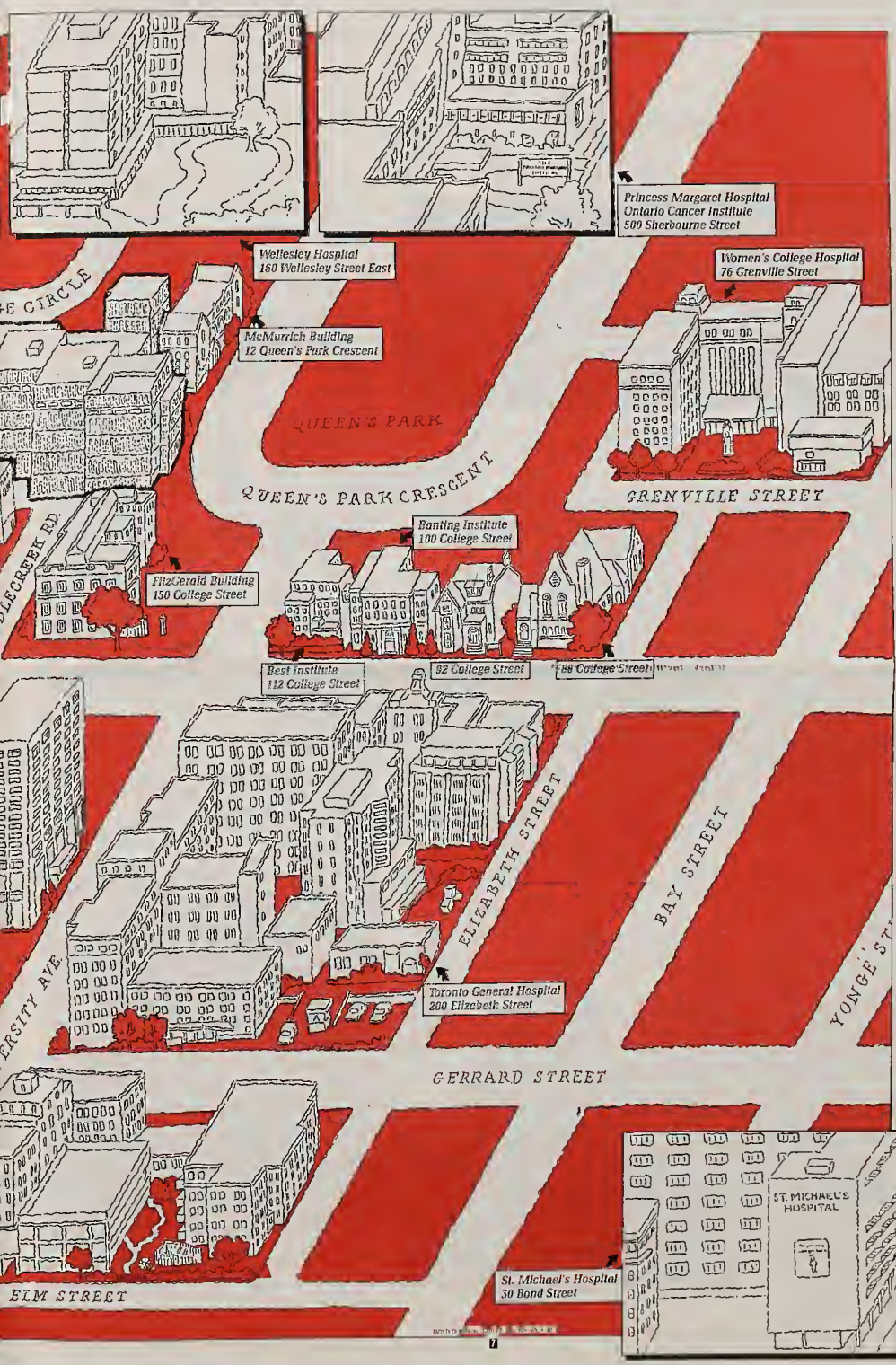


Illustration by Barbara Bailey

Sick Children's:

Building on a Foundation of Excellence

At three, Maggie was in possession of that insatiable curiosity common to most children of her age. Thus, the tub of scalding water her mother sternly warned her to stay away from, proved to be an overpowering lure.

The subsequent accident earned little Maggie a place in history. The badly-burned child was the first patient admitted and treated at the Toronto Hospital for Sick Children, which had opened its doors only one month previous in March 1875.

In the first 75 years of the hospital's history, Maggie shares the limelight with three other distinguished characters, each of whom contributed immeasurably to create what was destined to become the largest and most influential children's hospital on the continent.

Elizabeth McMaster — The Founder

One afternoon, in the closing months of 1874, a group of Toronto's most socially-prominent women took tea at the home of Mrs. Elizabeth McMaster. Social convention soon dispatched with, the group (which incidently included Lady Macdonald, wife of Sir John A. Macdonald) quickly got down to the business at hand — "How could they best help sick children?"

Central to their discussion was a report from the hostess. Elizabeth McMaster had for some time been interested in the idea of a children's hospital and had built a strong supporting case. In her presentation, she shocked the ladies with her statistics — over 50 percent of all recorded deaths in Toronto were children under 10 years old, and, she added, this condition had not improved in 50 years. General hospitals quite simply could not provide the special care needed by children. As proof of this, 17 major European cities had established children's hospitals and it was high time Toronto followed suit. Her guests agreed.

Immediately, a plan was set in motion to broadcast the need for a children's hospital, in churches and social organizations. Soon cash began to flow in. With the first monies, the ladies printed a pamphlet outlining their plan which was distributed widely.

Public response to the appeal was good. Just a few months after that first meeting at Elizabeth McMaster's home, the ladies were able to rent a house at 31 Avenue Street, near what is now Toronto General Hospital. The house had 11 rooms, six iron cots and the rent was $320 a year. These arrangements made, the hospital was declared open "for the admission and treatment of all children regardless of creed or colour."

John Ross Robertson — The Builder

If Elizabeth McMaster was responsible for laying the Hospital's solid foundations, John Ross Robertson was its buttress, shaping and supporting the institution's future. Robertson, the founder and publisher of Toronto's *Evening Telegram*, became keenly interested in children's hospitals following the death of his infant daughter in the early 1880's. So great was his interest, that he travelled through the United States and Europe touring children's hospitals, and upon his return moved to incorporate the best of what he had seen into a new hospital building.

During the first 11 years of the Hospital's operation, the facility had moved three times. Two buildings, which housed the hospital, had no running water, and a third could not be heated properly. Using his political connections and personal fortune, Robertson built the first children's hospital in North America on the corner of College and Elizabeth Streets. When it officially opened in 1892, the hospital boasted a cleft E-shape to provide cross-ventilation and maximum light to wards, as well as a rooftop playground.

The Hospital for Sick Children, 1913, 67 College Street at Elizabeth Street.

Robertson served as the Chairman of the Hospital's Board of Trustees from 1891 to 1918. At his death, he left the income of his estate to the Hospital.

Dr. Alan Brown, (1887-1960), Physician-in-Chief from 1919 to 1951.

Dr. Alan Brown — the Healer

Robertson's love of children was tempered by his antipathy to the medical profession — particularly doctors. As Chairman of the Board he was responsible for interviewing prospective staff members. His inquisitions were enough to cow the hardiest of souls. Robertson's first words were: "Are you any good?", and he would conclude with, "Well, tell them I said to give you a try. Now get out of here."

In 1914, he met his match in the medical profession. Earlier that year, a young physician, Dr. Alan Brown, had returned from paediatric studies in Europe. Brown had heard of the high mortality rate at the Toronto hospital and for weeks had sought a staff position. When finally granted an interview, he told Robertson, "I'll reduce the infant mortality rate in the wards by 50 percent in one year." Robertson hired him and one year later he had achieved his promise.

Brown's education sparked a strong concern with proper hygiene and infant nutrition. During his studies in Europe, he had procured a set of wax models of infant stools, and insisted that by examining a baby's stool its condition could be deciphered. Much to the consternation of his students, he initiated "stool rounds". These rounds entailed careful examination of diapers that had been labelled and saved by the nurses.

On June 2, 1919 he was appointed Physician-in-Chief and for the next 32 years, the Hospital for Sick Children would be Brown's hospital. He always considered paediatrics a preventive science. Following his appointment, he was able to install a research laboratory and hire a group of young doctors to work on infant nutrition.

Later in the 1930's, he was convinced that the Ontario Government was stalling in its plans to make the pasteurization of milk compulsory. He told Premier Mitchell Hepburn that the politicians did not have the "guts" to pass the law because of the farm lobby. He then invited, some say commanded, Premier Hepburn to the hospital to see the hundreds of children with bovine tuberculosis. A shaken Hepburn returned to Queen's Park and a few weeks later the Bill was passed.

From the beginning to the end of his world famous career, Brown was for babies. He spared no one if they got between him and what he thought best for his babies. As Physician-in-Chief, he supervised the treatment of every medical and most surgical patients in the Hospital. To one doctor, who had prepared a patient's history, he roared, "The idiot elevator boy could have prepared a better history!"

For many years he was Professor of Medicine in charge of Paediatrics in the University's Faculty of Medicine. When he retired in 1951, he had trained all but two of Canada's professors of paediatrics and 73 percent of the country's child specialists.

By the late 1930's, Robertson's hospital at College and Elizabeth Streets was inadequate for the growing number of patients. Following the Second World War, Brown spearheaded a public drive to raise the required $12-million for a larger, modern structure. His efforts stand today at 555 University Avenue.

Thoughout his career many individuals may have resented the treatment he gave them in his care for children. "But thousands of Canadian babies liked it so well that they lived to grow up, which a great number of them had not managed to do before Dr. Brown came on the scene," wrote the *Globe and Mail* at the time of his death.

Faculty Exhibits Featured at Ontario Place

If you were among the 600,000 people who visited the upper level of Ontario Place's Future Pod this past summer, you would have found displays from the Faculty of Medicine assuming a prominent position on the exhibit floor.

Future Pod was created by the Provincial Government to showcase technological advances in Ontario. The second floor exhibit area is used by the Ministry of Education to display technologically advanced teaching aids. In this forum, the Faculty had a good opportunity to demonstrate several of the devices it is presently using for public education.

The exhibit area was designed jointly by Angela Cluer, medical artist and sculptor with the Division of Instructional Media Services (IMS) and Dave Ross, Displays Officer with the Ministry of Education. Earlier this year, the Ministry of Education approached IMS for exhibit ideas from the Faculty of Medicine. Initially, IMS was contracted to produce five of the eleven exhibits that could be accommodated on the display floor. However, Angela's organizational ability quickly revealed itself, and before long, the Ministry of Education asked her to help design the layout for the entire exhibit area.

In designing the exhibit area, Angela wanted the spectators to leave with a sense of wonderment and pride in the achievements of their fellow Ontarians. From the absorbed expressions of the people in these photographs, it is apparent that this intention was realized. —

When visitors approached this exhibit, the heart lay dormant; but by placing a finger in the sensor, the heart began its reassuring thud. But with an interesting twist — it beats in time with the viewers' pulse!

The flexible heart model was built in cooperative effort between IMS and the Ontario Science Centre. The designers used special electronics and materials to create the life-like three dimensional heart. Movement in the atrial and ventricular areas is created by electronic displacement of air in the model to create a unique learning experience for viewers.

North America's first Transmissions Electron Microscope was designed in 1938 by two graduate students in the University of Toronto's Department of Physics. Now two types of electron microscopes are used, the Transmission E. M. which magnifies up to one million times and the Scanning E. M. which magnifies up to 200,000 times and gives a three dimensional perspective.

Working from black and white electron micrograph photos, the large transparencies here, donated by the Playfair Neuroscience Unit and the Electron Microscopy Laboratory, were enhanced by a special computer process which translates black and white photographs to color to add interest.

Developed by Cardiology researchers, the Cardiac Mapping System monitors the heart's electronic activity with each beat, detecting abnormalities, such as arrythmias, as they occur. A 'sock' with 110 electrodes, placed over the heart during surgery, relays information at the faulty electrical centres to a video display terminal. This pinpoints the exact location of the problem area so that it can be surgically removed.

The running prosthesis exhibit (above) was conceptualized and created by IMS. The prosthesis was a major cooperative effort between McMaster University, Chedoke-McMaster Hospital, Henderson Hospital, George Brown College, and the War Amputees of Canada.

This prosthesis, developed in Hamilton, is a refinement of a prototype leg developed by Terry Fox during his Marathon of Hope. Using Terry's telescoping spring concept, the researchers added a sophisticated pneumatic knee and other modular concepts which allow a one-to-one gait rather than Terry's familiar step-step-hop.

As most physicians are well aware, explaining internal anatomy to a sick child can be a stressful experience for both parties. Youngsters learn best from hands-on play, however, that approach to instructing a child about his or her anatomy is obviously impossible. That is until recently.

The concept for these large, colorful stuffed models (above) originated at IMS and is now being tested quite successfully with public school children at Doctors Hospital as part of their community health awareness program.

Harry Whittaker, Assistant Professor in the Department of Anatomy, and Dr. E.A. Sellers, Professor Emeritus of Pharmacology and founder of the Banting and Best Diabetes Centre, died this past summer.

Although, it was never the intention that TABLET should run obituaries, in the case of these two outstanding individuals mention of their years of tremendous contribution to the Faculty should be made. This issue of TABLET features Harry Whittaker; the winter issue of TABLET will feature Dr. Sellers.

When asked to summarize the 55 years that **Harry Whittaker** worked and taught in the Faculty, **Dr. Arthur Axelrad** of the Department of Anatomy responded, "No matter where I go in the world, if I meet a U. of T. trained M.D., they invariably ask 'How's Harry?'"

Harry Whittaker's care and concern for his students made him one of the most popular instructors in the Faculty. His regard for students as people made him a good sounding-board for the discouraged and an excellent mentor for the gifted. More than a few physicians are practising today because Harry Whittaker cared enough to not let them quit.

As Dr. Axelrad says, "The essence of his popularity was that he cared. He loved teaching so much that even six years after his retirement he was still taking on new classes."

Harry Whittaker came to the Faculty in 1930 as a lab technician. In 1955, he was appointed Chief Technician in Histology, Demonstrator in 1971, Lecturer in 1975 and Assistant Professor in 1979.

An obituary written by his son which appeared in the *Globe and Mail* read, 'After his war-time work on skin tissue and the effect of burns, he declined offers of research positions at universities and research institutes in Canada and the United States, preferring to dedicate his life to teaching, which he called the real purpose of a university. He went on to become one of the most honoured teachers in his field.

The medical students conferred on him an honorary membership to their Medical Society in 1956. In 1975 he was granted an Outstanding Teaching Award by the Ontario Confederation of University Faculty Associations, having been nominated by more than 600 medical students as well as many of his former students, including the then president of the University of Toronto. In 1977 he received one of the distinguished service awards made to commemorate the 150th anniversary of the University, along with a citation naming him one of the greatest friends the medical students have ever had. In 1984 the Medical Alumni Association bestowed on him the Dr. Mary E. Hollington Award for Excellence in Teaching in the Pre-clinical years.

The hallmark of his teaching was his emphasis on clarity, insisting that a physician must be able to explain even the most complex medical matters in terms that a lay person or even a child could understand. He would advise his students, "Keep it simple," and "If you can't explain it to your little brother or sister, you probably don't understand it yourself."

Like all true teachers he measured his success by the achievements of his students. During his last months, Harry Whittaker received visits from hundreds of his former students, ranging from first-year medical students to leading specialists, researchers and teachers.'

From his students ...

On Monday August 26th 1985, the students of the Faculty of Medicine suffered a great loss. One of the finest teachers and warmest friends ever to grace the Faculty passed away. Harry Whittaker, affectionately known as 'Harry' to his students, had been teaching first year Histology since the Forties. Thousands of medical students eased through Histology under his guidance and unique teaching style.

In a curriculum necessarily filled with an inordinate number of facts and technical details, Harry's philosophy could be summarized in three words "keep it simple." He stressed the importance of understanding over the memorization of minute details. "I'm not teaching you Histology, I'm teaching you to think like doctors," he said.

Amidst the self-doubts and uncertainties experienced by all first year medical students, Harry's faith, understanding and above all dedication were admired and greatly appreciated by all of us. Harry was always available when you needed his advice, be it with respect to Histology or life in general. He also possessed a store of history about our Faculty and its members both past and present, which provided many of us with fascinating stories.

If we are to remember Harry by one thing it would be his warm nature and sense of humor. Such attributes will not be forgotten.

We, the students that Harry left behind, will always remember. We have witnessed the demise of an institution, of a legend, of a man who for 53 years gave of himself one hundred percent, to his students and to this Faculty.

In an effort to keep the spirit and name of Harry Whittaker alive, the students of the Faculty of Medicine through the Medical Society, have established the **Harry Whittaker Memorial Scholarship Fund.** Any donations to this fund can be made payable to the Harry Whittaker Memorial Fund, care of the Medical Society, Faculty of Medicine. For more information, contact the Medical Society at 978-8750.

It was in the early months of 1983, that a small, eight page newsletter first appeared in the Faculty of Medicine. Bearing the University colours and Faculty crest, the newsletter proclaimed itself a new venture in Canadian health communications. It was filled with health information verified by Faculty members and written for a lay audience. That newsletter, appropriately called *Health News*, was the first in Canada to be produced by a university Faculty of Medicine.

In the two and a half years since the first issue, *Health News* has grown from a small, but loyal, band of readers in the university community to a much larger, but equally loyal, number of readers from the general public. Actually, the number of readers increased dramatically last month, when Imperial Oil agreed to purchase 15,000 copies of each issue of *Health News* to distribute to their employees.

However, the growing number of subscribers is not the only indication that the publication is a success. As radio and television audiences across the country can attest, the editor of *Health News* has become something of a celebrity, as a Faculty spokesperson. In fact, in the past 12 months, the editor was interviewed more than 30 times by the broadcast media on topics ranging from Debunking the Sugar Myth, to Sleep Disorders to Middle Ear Infections.

Why has *Health News* been successful? A great deal of credit rests with that much interviewed editor, **Dr. June Engel.** Yet, as she is quick to point out, over the years dozens of Faculty members have contributed generously with time and knowledge in support of *Health News* articles.

Dr. Engel says she decided to pursue writing, in the hope of fulfilling a personal career objective — to be involved in public health education. When approached by **Dean Lowy** and **Dr. G. Burrow** with their idea of a health bulletin for the lay public, she was quite enthusiastic, since she long had advocated better public health information.

Dr. Engel brings to the Faculty years of experience as a science/medical writer combined with a solid background in science. She holds a Ph.D. in Biochemistry from University College in London, England and worked as a research fellow with Dr. E. Venning at Royal Victoria Hospital in Montreal. She, also, has written dozens of medical/scientific articles for magazines like *Quest*, *Chatelaine* and the *Medical Post*. Dr. Engel has been involved in the production of numerous videotapes for both professional and lay audiences; having worked for Rediffusion TV in Britain, both of the major Canadian television networks and the National Film Board of Canada.

"Too often the media has difficulty translating medical material into lay terms, leading to gross distortion of fact. In many cases, the researchers, who are the best qualified to discuss a topic, are reticent about talking to a reporter because they fear the media theatrics," she believes. "Very few people want their work turned into a media event."

Dr. Engel says that because she is a scientist, she can identify with the researchers' desire to convey information, without unnecessary hype. Faculty members respond well to this sensitivity and are usually very willing to be interviewed for *Health News*.

On the other side, because she has worked as a journalist she knows the danger of oversimplifying and thus misleading the reader. That is why every article that appears in *Health News* is first painstakingly researched and then checked over by at least three Faculty source experts.

The articles in *Health News* take a preventive stance to good health, rather than the curative model. Dr. Engel says that her goal for *Health News* is to educate readers about how they can take responsibility for their own good health.

For more information about *Health News*, call the office at (416) 978-5411, or write in care of the Faculty of Medicine, Medical Science Building.

tablet talk

Announcements

■ In June 1985, **Dean Fred Lowy** was unanimously elected to a two-year term as Chairman of the Council of Ontario Faculties of Medicine. COFM, an affiliate of the Council of Ontario Universities, is composed of the dean and one faculty colleague from each of Ontario's five medical schools. **Dr. Bernard Langer** is Toronto's other respresentative.

The Ontario Medicaf Association, the College of Physicians and Surgeons of Ontario, and the Ontario Council of Administrators of Teaching Hospitals have observer status.

The Council's purpose is to provide a forum for communication between Ontario faculties of medicine. It also serves as fiaison between the universities and the government and its agencies on matters refated to medical education and research and in this respect has provided an effective voice for more than twenty years.

Meetings are held at monthly intervals.

■ **Dr. Charles H. Tator**, Chief of the Division of Neurosurgery at Toronto Western Hospitaf, has been elected President of the Neurosurgicaf Society for 1985-86.

■ **Dr. Charles Hollenberg**, Vice-Provost Health Sciences, has been named chairman of the Ontario Universities Committee on Health Research, created recently by the Council of Ontario Universities. The coordinating group, made up of associate deans from Ontario's five medical schools as well as representatives from schools of pharmacy, nursing, dentistry, veterinary medicine, ophthalmology, and physicaf and occupational therapy, wifl examine methods of dealing with the present underfunding of health research. Three other University faculty members sit on the committee — **Dr. Harvey Anderson**, Medicine, **Dr. David Grant**, Pharmacy, and **Dr. Tony Melcher**, Dentistry.

■ With $600,000 from IBM Canada, researchers and clinicians from the Institute of Biomedical Engineering, the Department of Rehabilitation Medicine and the Hugh MacMillan Centre pfan to devefop a model of a device that will allow the disabled to use computers. While a keyboard or joystick are the usual means of transmitting commands to a computer, many disabled people cannot use such tools. The aim of this project is to develop a portable, electronic device that is capable of conveying commands from a disabled person to any type of computer. The first phase of the program began in July.

Grants and Awards

■ Five Facufty researchers recently were awarded research grants by the Parkinson Foundation. **Drs. Oleh Hornykiewicz** and **Stephen Kish** of the Clarke Institute received their grant for their research in patterns of degeneration of nerve networks in Parkinson's disease. **Dr. Phillip Seeman**, Department of Pharmacology, was awarded for his study of the role of the different kinds of receptors on which dopamine acts in the response of the Parkinson patient to treatment with levodopa. And **Drs. Derek van der Kooy** and **Joseph Connolly**, Department of Anatomy, received their grant to study how the neurotransmitter phenotype of nerve cells affected by Parkinson's disease is normally regulated.

■ Two other Faculty members recently received a grant from the Canadian Foundation for Ilcitis and Colitis. Drs. H. Cheng and M.J. Bjerknes, of the Department of Anatomy, will study "Gene Expressions in Idiopathic IBD."

Appointments

■ **Dr. Mary V. Seeman** has been appointed Chief of Psychiatry at Mount Sinai Hospital.

■ **Dr. Charles Morris Godfrey**, Faculty Archivist, was efected to Senior Membership in the Canadian Medical Association at the CMA's annual meeting in August.

■ **Dr. Marvin Tile** has been appointed Chief of Surgery at Sunnybrook Medical Centre.

■ **Dr. Desmond Colehan** has been appointed Director of Emergency Services at Toronto Western Hospital.

■ The Hospital for Sick Children has appointed **Dr. Daune MacGregor** as Director of Medical Education.

■ **Dr. R. W. Osborn** is the new acting Chairman of the Department of Preventive Medicine and Biostatistics.

■ Following the retirement of **Prof. Nancy Joy**, **Prof. Alex Wright**, Director of Medical Education at the Hospital for Sick Children, will be acting as Chairman of the Department of Art as Applied to Medicine.

Aikins Awards

In 1984, the Faculty of Medicine established the new **W.T. Aikins Awards for Excellence in Undergraduate Medical Teaching**, to recognize the outstanding teachers in our Faculty annually, and to emphasize that undergraduate medical teaching is one of our most important activities. The awards stress the importance of excellence in individual teaching, as well as the need for innovation and development in education. There are three categories of awards: Individual Teaching Performance, Development and Use of Instructional Media and Course Development and Coordination. The Awards are named after William Thomas Aikins, first dean of the Faculty of Medicine (1887-1893). He was well known for his commitment to and excellence in medical education. The awards, wifl be presented at the combined Faculty Council and Faculty Assembly meeting on Monday, November 25th. Winners' names will be inscribed on a bronze plaque mounted in the Memorial Lobby of the Medical Sciences Building.
The winners are:

Dr. Kenneth Robb, Department of Medicine — Individual Teaching Excellence
In the words of his students, Dr. Robb is a 'model and inspiration' in all his undergraduate teaching commitments.

Dr. Alexander Roberts, Department of Anatomy — Individual Teaching Excellence
Dr. Roberts has always stressed those aspects of anatomy that are key to the practising physician, and his ability to make anatomy clinically relevant to his students is unique.

Dr. Dean Chamberlain, Department of Pathology — Excellence in Course Coordination and Development
The Year Two Pathology course, developed by Dr. Chamberlain, is known to be an excellent course which satisfies the medical students' need for comprehensive pathology training.

Dr. Narashinhan Ranganathan, Department of Medicine — Development and Use of Instructional Media
Dr. Ranganthan developed an ingenious and elaborate system which allows students to simultaneously listen to heart sounds, while watching on an oscilloscope what they are hearing, and on a television screen a video of the patient's jugular pulse.

Dr. Barbara Stubbs, Department of Family and Community Medicine — Development and Use of Instructional Media
Dr. Stubbs has, with much energy and enthusiasm, tailored the Faculty's simulated patient program into a highly effective and uselul instructional medium.

Two lectures in the **Rosenstadt Lecture** series have been set for November and December.

The first, hosted by the Department of Medical Genetics, will be held on Monday November 18th, at 4.00 p.m. in Room 4279, Medical Sciences Building. The speaker is **Dr. Ruth Clayton** of the Department of Genetics, University of Edinburgh. The title of her lecture is *"The Differentiation and Maintenance of the Eye: A Focus for Interdisciplinary Studies."*

The second, hosted by the Department of Behavioral Science, will be held Thursday December 5th, at 4.00 p.m. in Room 3163, Medical Sciences Building. The speaker is **Dr. Susan Penfold**, Department of Psychiatry, University of British Columbia and Chair of Women's Studies, Simon Fraser University. Her topic is *"Women and Depression."* ▬

Leading Scientists Awarded Highest Honor by University

*This issue of TABLET continues the profiles of the Faculty of Medicine's University Professors — **Dr. Robert Salter, Dr. Louis Siminovitch** and **Dr. James Till.***

The designation "University Professor" is the highest academic rank of the University of Toronto and is granted to those who have made outstanding contributions to research. Only fifteen people bear this title at one time. Upon retirement, the bearer becomes "University Professor Emeritus" and another "University Professor" will be appointed in his or her stead.

Dr. Robert Salter was named "University Professor" in 1981 for his outstanding contributions as an orthopaedic surgeon-teacher-scientist. His is best recognized for the "Salter Operation" — a procedure he designed and pioneered in the late 1950's. The procedure is used to correct certain abnormalities of the hip joint in children.

Dr. Salter is Professor and Head of Orthopaedic Surgery within the Faculty, and is Project Director at the Research Institute at the Hospital for Sick Children. The 1947, U. of T. trained, M.D. has served his University and the H.S.C. in various capacities since 1955.

Dr. Salter finds it gratifying to share knowledge and ideas at all levels. He has been a Visiting Professor in 130 universities in some 30 countries. His textbook of Disorders and Injuries of the Musculoskeletal System is considered a classic.

Research has been an essential part of Dr. Salter's academic activities since 1955. In 1970 he originated the exciting concept of Continuous Passive Motion (CPM) for diseased and injured joints and is continuing to investigate many aspects of this concept in the Hospital's Research Institute.

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Since 1978, Dr. Salter and his orthopaedic colleagues in the University have applied the concept to the care of a wide variety of joint conditions in both children and adults. In the research lab he is currently studying the repair of large defects by means of periosteal grafts. He has found that under the influence of CPM, periosteum (which normally produces bone) can produce new cartilage.

CPM for humans has been made possible by collaboration with U. of T. engineers — particularly John Saringer. The team is looking at ways to move human joints immediately after surgery at approximately one cycle per minute continuously for about one week.

Dr. Salter's honors include: The Royal College Medal in Surgery, the Cairdner International Award for Medical Science, the Nicholas Andry Award, Fellow of the Royal Society of Canada, Officer of the Order of Canada and honorary degrees from three universities.

Dr. Louis Siminovitch was named University Professor in 1976 for his contributions to the development of research in Canada and for his own research in genetics.

A former Chairman of the Faculty's Department of Medical Genetics, Dr. Siminovitch retired, in July, from his post as Head of Genetics in the Research Institute at the Hospital for Sick Children. He has since moved his lab to Mount Sinai where he is Director of that hospital's new Research Institute. Dr. Siminovitch retains the title "University Professor Emeritus."

For the past dozen years, Dr. Siminovitch has studied the genetics of mammalian cells. He has also done research in morphogenesis in bacterial viruses, in hemopoiesis and in the genetics of bacterial viruses and on cytogenetics.

His work is now on genes that regulate resistance to drugs. Called amplified genes, these genes make multiple copies of themselves.

... research in morphogenesis in bacterial viruses, in hemopoiesis and in the genetics of bacterial viruses and on cytogenetics.

Dr. Siminovitch earned his Ph.D. in Chemistry from McGill University in 1944. He is a Fellow of the Royal Society of Canada and a Fellow of the Royal Society of Great Britain. He won the Izaak Walton Killam Memorial Prize and the Cairdner Foundation Whiteman Award in 1981. He was given the Flavelle Gold Medal of the Royal Society of Canada in 1978, and became an Officer of the Order of Canada in 1980. He is a past President of the National Cancer Institute.

Dr James Till's field is cancer research and it was his outstanding contributions to cell biology, as applied to leukemia, which earned him the honor of University Professor in 1984. Much of his work was done with Dr. E.A. McCulloch.

Dr. Till received his B.A. (1952) and his M.A. (1954) from the University of Saskatchewan. After receiving his Ph.D. from Yale, he came to the Ontario Cancer Institute in 1957 with Dr. Harold Johns and was appointed to U. of T's Department of Medical Biophysics in 1958.

In 1969, he and Dr. McCulloch were joint winners of the prestigious Cairdner Award, based on work done at the O.C.I. on the multiplication of stem cells in mice. This work has greatly enhanced the understanding of leukemia.

In fact, Dr. Till's entire scientific career has been devoted to various aspects of cancer research. Initially, he was laboratory-based, first as a radiation biologist and later as a cell biologist focussing on experimental haematology.

... entire scientific career has been devoted to various aspects of cancer research.

These days,as a senior scientist in the Division of Biological Research at the O.C.I., he is investigating factors that influence quality of life for cancer patients after treatment and the methods appropriate for measuring these factors.

About five years ago, Dr. Till began to feel that quality of life issues were being neglected, so he decided to join other scientists pioneering in the development of quantitative methods of monitoring the quality of life. For the first time, he is finding his research methodology overlapping with that used in community health.

Dr. Till has also served the University administratively. For three years he was Associate Dean, Life Sciences in the School of Graduate Studies.